

Abstract

Process and device for the parallel preparation of at least
4n oligonucleotides

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In a process and a device for the parallel preparation of
at least 4n oligonucleotides, at least four inserts each
with n reaction vessels are first arranged on a plate (16),
each reaction vessel containing a nucleotide initiator base
10 bound to an inert carrier. Particular operations are then
carried out in parallel with one another at four stations
(28, 30, 32, 34), and in particular a deblocking operation
simultaneously in all n reaction vessels of the insert at
the first station (28), a first washing operation
15 simultaneously in all n reaction vessels of the insert at
the second station (30), a coupling operation in all n
reaction vessels of the insert at the third station (32),
and, simultaneously in all n reaction vessels of the insert
at the fourth station (34), a second washing operation
20 followed by a capping operation followed by a third washing
operation followed by an oxidation operation followed by a
fourth washing operation. The plate (16) with the inserts
is rotated station by station, the abovementioned
operations being carried out, until the desired
25 oligonucleotides have been formed by coupling individual
nucleotides to one another.

(Fig. 1)

10040033-102601